

Amendments to the Specification:

Please replace the paragraph [0046] with the following amended paragraph:

A uniform coating of a binding agent or entity for attaching biological and chemical analytes is applied to cover at least a portion of the surface area of the voids and the top surface of the porous inorganic layer of the substrate. Although the nature of the binding agent is not intended to be limiting, the binding agent can be a cationic polymer, preferably either gamma-aminopropyltriethoxysilane or polylysine. Other suitable chemical agents, as described below, may be used or substituted for attaching biological molecules (e.g., DNA, RNA, oligonucleotides, peptides, proteins, etc.).